Attorney's Docket No.: 10417-006001 / S21-Applicant: Shuichi Kikuchi et al. 118827M/SW

Serial No.: 09/444,819

: November 22, 1999 Filed

Page : 8 of 10

REMARKS

Claims 1, 2, 8 and 9 have been amended. Claims 1-4, 8-10, 17, 19 and 22-34 are pending.

The Applicants thank the Examiner for granting a telephone interview on December 23, 2003 to clarify the rejection in the Final action.

Claim Rejections – 35 U.S.C. 103

Claims 1, 2, 8 and 19 were rejected as allegedly being unpatentable over Kwon et al. (U.S. Patent No. 5,907,173) in view of Moslehi (U.S. Patent No. 5,949,105).

Claims 3-4, 9-10 and 17 were rejected as allegedly being unpatentable over Kwon et al. and Blanchard et al. (U.S. Patent No. 5,869,371) and further in view of Moslehi.

Claims 1, 2, 8 and 9 have been amended to clarify that the second part (22b) of the twopart drift region (22) is located below the drain region (5). See, for example, page 13, lines 16-18 and FIG. 1. No new matter has been added. The amendment clarifies that the drift region is in two parts with the first part formed below the gate and the second part formed below the drain. This construction is seen, for example, in FIG. 1 and is a result of the construction of the semiconductor device disclosed in the specification as forming the drain region (5) in the drift region (22), which inherently results in the drift region (22) below the drain region (5).

The Office action points to elements 26 and 24 in FIG. 1 of the Moslehi reference as corresponding to the two-part drift region recited in independent claims 1, 2, 8 and 9. The Applicants submit that Moslehi actually is disclosing a three-part drain region comprising a heavily-doped portion (22) and lightly-doped portions (24) and (26) of which portion (26) is overlapped by the gate (42). Col. 3, lines 47-55 and FIG. 1.

However, the Office action seems to interpret those elements as a two-part drift region that extends from the channel region (28) to the drain region (22). The first part (26) is of substantially uniform depth and is formed entirely under the gate electrode (42). The second part Applicant: Shuichi Kikuchi et al. Attorney's Docket No.: 10417-006001 / S21-118827M/SW

Serial No.: 09/444,819

: November 22, 1999 Filed

Page : 9 of 10

(24) is formed more deeply than the first part and is located in the neighborhood of the drain region (22). The second part (24) of the two-part drift region, as defined in the Office action, is located adjacent, not below, the drain region (22). Col. 3, lines 47-55 and FIG. 1. Therefore, the limitation is not disclosed or suggested, because those claims recite that the second part of the two-part drift region is formed below the drain region.

Further, neither Kwon et al. nor Moslehi teaches a semiconductor device having a twopart drift region with the second part formed below the drain region. There is no suggestion that forming the layers in question as recited in claims 1, 2, 8 and 9 can result in a higher breakdown voltage and a reduction in the ON-resistance.

The Blanchard et al. reference does not add the elements missing from both Kwon et al. and Moslehi and, thus, does not render any of the pending claims unpatentable when considered alone or in combination with the cited references.

The Applicants respectfully request reconsideration and withdrawal of the 35 U.S.C. 103 rejection of claims 1, 2, 8 and 9.

Claims 2-4, 9-10, 17, 19 and 22-34 depend directly or indirectly from one of claims 1, 2, 8 or 9 and should be allowable for at least the same reasons.

Conclusion

All pending claims are in condition for allowance.

The Applicants do not believe that any fess are due. However, please apply any charges or credits to deposit account 06-1050.

Applicant : Shuichi Kikuchi et al.

Serial No.: 09/444,819

Filed : November 22, 1999

Page

: 10 of 10

Respectfully submitted,

Paul A. Levy Reg. No. 45,748

Attorney's Docket No.: 10417-006001 / S21-

118827M/SW

Date: February 10, 2004

Fish & Richardson P.C. 45 Rockefeller Plaza, Suite 2800 New York, New York 10111 Telephone: (212) 765-5070

Facsimile: (212) 258-2291

30177070.doc